Abstract

The invention is related to an equalizer comprising, for instance: means for creating a first covariance matrix and defining a Cholesky decomposition matrix of an inverse matrix of the first covariance matrix, means for removing selected covariance components from the Cholesky decomposition matrix, means for computing the inverse of a sub-matrix, which represents the common part of the first covariance matrix and a second covariance matrix, which includes covariance estimates of a second observation time, by using the aid of the Cholesky decomposition of the inverse matrix of the first covariance matrix, means for estimating interference from a received signal at a second observation time and determining additional covariance components on the basis of the estimation and means for creating the Cholesky decomposition of the inverse matrix of the second covariance matrix by using unitary rotations.